dominantly the result of a difference in grainsize distribution of the optically active layer (i.e., fine particle coatings). The effect of packing soils in the field and laboratory also increases spectral contrast but not to the magnitude of that observed for undisturbed and wet-sieved soils. Data from other sites across the U.S. that show similar character are reported in **[2].** Since it is a common practice to use laboratory spectra of field samples to interpret spectra obtained remotely, it is our recommendation that comparisons between field and laboratory soil spectral measurements include wet- and dry-sieved soil samples in the laboratory and undisturbed and disturbed samples in the field.

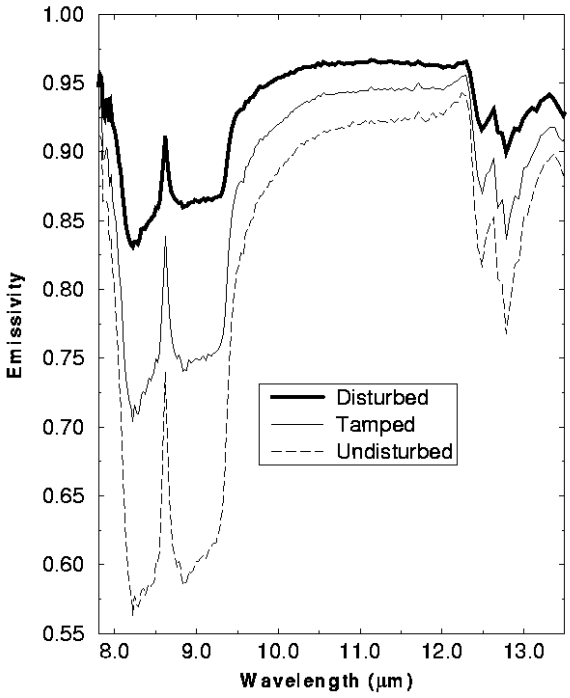

Figure 1. Field emissivity spectra of an undisturbed, disturbed, and tamped surface at Camp Lejeune, N.C., showing decreased spectral contrast for the disturbed surface. Note also that tamping the surface does not restore the spectral contrast to that for the undisturbed surface.

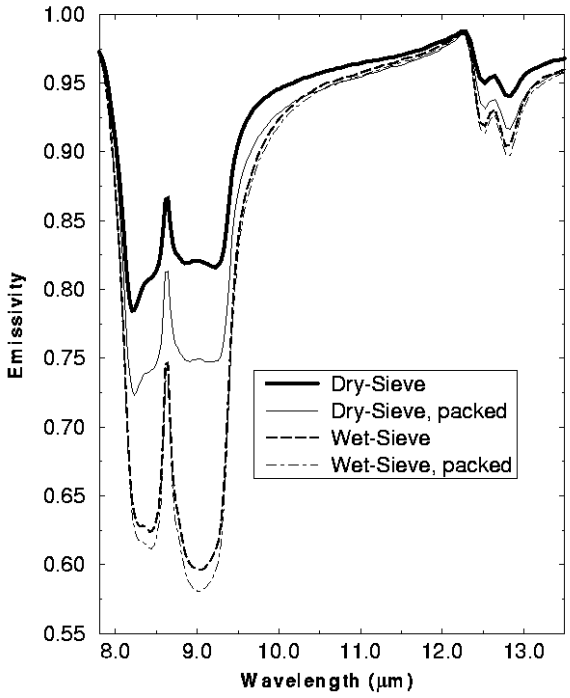

Figure 2. Laboratory hemispherical reflectance spectra (converted to emissivity using Kirchhoff's Law) for packed and unpacked, dry- and wet-sieved 53-300 μm samples from Camp Lejeune showing decreased spectral contrast for dry-sieved sample. Note that packing the dry-sieved sample does not increase the spectral contrast as much as wet-sieving.

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